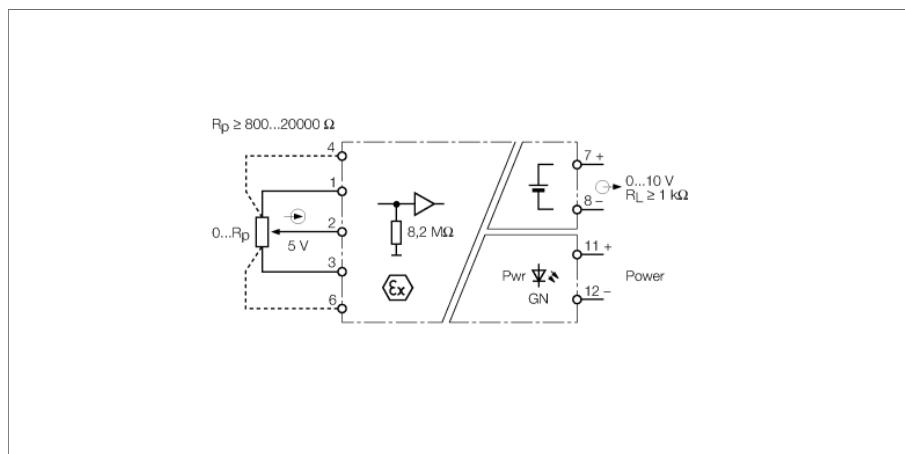


## Potentiometer Amplifier

### 1-channel

### IM36-11EX-U/24VDC



The 1-channel potentiometer amplifier IM36-11EX-U/24VDC is designed to transmit signals from 3 or 5-wire potentiometers galvanically isolated from the Ex area to the non-Ex area and to converted them into normalized 0...10 V analog signals. The resistance value of the wiper contact, ranging from 0  $\Omega$  to the nominal resistance value (final value) of the potentiometer, is detected and linearly processed.

A potentiometer is defined by its nominal resistance value. Any potentiometer can be connected, provided the nominal resistance is 800 ... 20000  $\Omega$ . Common potentiometers featuring a nominal resistance of 1 k $\Omega$  or 10 k $\Omega$  can thus be used. The admissible line resistance is maximally 50  $\Omega$  with a potentiometer resistance of 800  $\Omega$ .

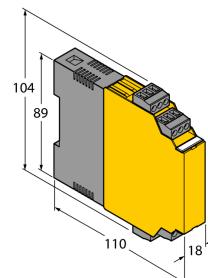
Galvanic isolation between input circuit, output circuit and power supply.

- ATEX, TR CU
- Transmission of potentiometer signals from the Ex area
- Potentiometer, nominal resistance: 0.8...20 k $\Omega$
- Output circuit: 0...10 V
- Complete galvanic isolation
- Input reverse-polarity protected



**Potentiometer Amplifier**  
**1-channel**  
**IM36-11EX-U/24VDC**

<b>Type designation</b>	IM36-11EX-U/24VDC
Ident-No.	7509526
<b>Nominal voltage</b>	24 VDC
Operating voltage range	19...29 VDC
Power consumption	≤ 2 W
<b>Input circuits</b>	Potentiometer
Potentiometer input	
Potentiometer	
Cable resistance	≤ 50 Ω
Voltage on resistor	5 VDC
Nominal resistance	0.8...20 kΩ
<b>Output circuits</b>	
Output voltage	0...10 V
<b>Measuring accuracy (including linearity, hysteresis and repeatability)</b>	≤ 0.3 % of full scale
<b>Galvanic isolation</b>	
Test voltage	2.5 kV
<b>Important note</b>	For Ex-applications the values specified in the corresponding Ex certificates (ATEX, IECEx, UL, etc.) apply.
Ex approval acc. to conformity certificate	TÜV 99 ATEX 1405
Application area	II (1) G
Ignition protection category	[EEx ia] IIC
<b>Indication</b>	
Operational readiness	green
<b>Protection class</b>	IP20
Flammability class acc. to UL 94	V-0
Ambient temperature	-25...+60 °C
Storage temperature	-40...+80 °C
Dimensions	104 x 18 x 110 mm
Weight	137 g
Mounting instructions	DIN rail (NS35) or panel
Housing material	Polycarbonate/ABS
Electrical connection	4 x 3-pin removable terminal blocks, reverse polarity protected, screw terminal
Terminal cross-section	1 x 2.5 mm <sup>2</sup> / 2 x 1.5 mm <sup>2</sup>
Tightening torque	0.5 Nm

**Dimensions**

**Potentiometer Amplifier****1-channel****IM36-11EX-U/24VDC****Accessories**

Type code	Ident-No.	Description	Dimension drawing
IM-CC-3X2BU/2BK	6900475	Cage clamp terminals for IM modules (Ex-devices with 18 mm overall width); includes: 2 pcs. 3-pin blue terminals and 2 pcs. 3-pin black terminals.	